



Approved For Release 2000/09/06 : CIA-RDP79-00798A000800030019-7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

STATINTL

24 SEP 1974

OFFICE OF  
RESEARCH AND DEVELOPMENT

Mr. V. A. Anikeyev  
Glavnyi Inzhener  
Glavnoye Upravleniye Po  
Razrabotke I Proizvodstvu  
Gazoochistnogo I Pyleulavlivayushchego  
Oborudovaniya  
Savvinskaya Naberezhnaya 3  
Moscow G-121 USSR

Dear Mr. Anikeyev:

The Protocol of the First Meeting of the US/USSR Working Group on Stationary Source Air Pollution Control Technology at the request of the Soviet side included an agreement whereby the U.S. and Soviet sides would survey organizations in their respective countries to determine interest in exploring potential for commercial interface in the area of air pollution control equipment and technology. The U.S. side in October of 1973 forwarded to the Soviet side a list of 45 U.S. industrial organizations which expressed interest in the development of cooperative or commercial relationships with groups concerned with related technologies in the USSR. At that time, we suggested that an appropriate follow-up might be to hold a trade mission that could serve as a forum for interested U.S. and USSR organizations to pursue their interests.

To date, we have received neither the Soviet list of organizations nor a response to our October 1973 submission. In the Working Group Meeting of April 1973, you indicated that there had been some delay in your evaluation of the material that we transmitted to you.

To assist us in our planning can you please advise as to when we might expect to receive your list of organizations interested in exploring commercial opportunities in accordance with the Protocol. In addition, can you please advise us as to when you expect to complete your evaluation of our material and when we can expect to receive your comments. We find ourselves in the difficult position of not being able to respond to inquiries of our industrial participants as to the status of this activity. Your guidance on this point would be appreciated.

I have enclosed a copy of the transmitted letter and abstracts sent to you in October, 1973.

Sincerely yours,

R. E. Harrington  
Director

Air Pollution Control Division

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10/17

*Air Pollution*

OSI  
OER  
[redacted]  
HMC  
Cmence  
LES  
CRS

Mr. V. A. Anikeyev, Chief  
All Union Gazoochistka Combine  
Savvinskaya Naberezhnaya, 3  
Moscow G-121 USSR

Dear Mr. Anikeyev:

During the March 1973 meeting of the US-USSR Working Group on Stationary Source Air Pollution Control Technology, it was agreed that both sides will prepare and submit to the other, a list of organizations interested in participation in discussions of cooperative activities or interested in exploring possibilities for trade activities including buying, selling, or licensing arrangements. It was agreed that the Environmental Protection Agency (EPA) would act as the organization in the United States to solicit expressions of interest from U.S. firms and organizations. We have now completed that activity and hereby transmit the results in accordance with the Protocol. Specific items in the Protocol include (1) 4th paragraph of the body of the Protocol, Section entitled "Stationary Source Air Pollution Control Technology" (approximately Page 5); (2) items 2.1.4, 2.2.3, 2.3.4, and 11.0.

Forty-five industrial organizations have responded to the solicitation expressing interest in development of cooperative or commercial relationships with groups concerned with related technologies in the USSR. Enclosure I is a list of these organizations. Each entry on this enclosure contains a brief abstract of the specific interest of that company.

The specific responses of each company along with the company's literature are being mailed to you under separate cover in six separate packages. They are distributed as follows:

- Package 1 (numbers 1 to 8)
- Package 2 (numbers 9 to 23)
- Package 3 (number 24 to 27)
- Package 4 (numbers 28 to 30)
- Package 5 (numbers 31 to 33)
- Package 6 (numbers 34 to 45)

Most firms were primarily interested in the sale of equipment, know-how, or services. But fourteen (numbers 3, 7, 8, 9, 11, 12, 13, 19, 23, 25, 26, 27, 36, 41)

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expressed interest in exchanging information or importing improved technology for air pollution control.

Firms interested in exporting equipment, systems know-how, or services offered the following kinds of technologies:

- (a) Control systems for sulfur oxide emissions control  
(1,3,15,17,19,29,24,25,28,29,30,35,42,43)
- (b) Control equipment for particulate emissions
  - Fabric Filters (3,6,9,12,24,29,45)
  - Wet Scrubbers (3,12,19,24,28,29,45)
  - Electrostatic Precipitators (3,4,6,11,12,16,24,25,26,29,45)
  - Inertial Separators (3,13,24,26,45)
- (c) Coke oven control systems (1,7,26,27,29)
- (d) Coal cleaning systems (3,15,24,33,37)
- (e) Methods for control of  $\text{NO}_x$  from power generation (30)
- (f) Coal conversion systems (8,10,26,33,34)
- (g) Petroleum desulfurization systems (8)
- (h) Petroleum handling systems (32)
- (i) Advanced power cycles (10)
- (j) Engineering consulting services (14,15,22,31,38)
- (k) Air quality monitoring systems (2,5,31)
- (l) Specialized analytical equipment or services  
(2,5,18,21,23,31,39,40,44)
- (m) Tall stacks (1,45)
- (n) Data collection and processing (2,31)

In addition to the responding industrial groups, one research institute expressed interest in cooperating with institutes having a common background in the USSR and the City of Fairbanks, Alaska indicated interest in collaborative work on ice fog control.

As follow-up to this exchange, it is recommended that trade missions or seminars be organized so as to provide a forum for the appropriate US firms and USSR organizations to meet and further explore trade opportunities. We would assume that you will require some time to distribute the material herein transmitted and to get responses from your interested organizations. Likewise when we receive your list of organizations, we will distribute the material to interested firms and organizations for their evaluation and comment. I recommend that we plan to hold a series of trade missions or seminars starting in January or February 1974. It would appear that it might be appropriate to structure the missions or seminars as follows:

- (1) Sulfur Oxide and Particulate Control
- (2) Industrial Process Control Technology to include:  
-coking, petroleum, coal and oil conversion
- (3) Atmospheric Monitoring, Analytical Methods and Instrumentation and Specialized Services

Depending upon the number of organizations involved in each category, it may be desirable to modify the above distribution.

It would be expected that the normal travel and lodging expenses of the US representatives associated with any trade missions or seminars that would be held in the USSR would be paid for by the companies involved. Similarly, the expenses of the USSR representatives associated with any trade mission or seminar held in the USA would be expected to be paid for by the sponsoring USSR organizations. Thus, the receiving-side-pays principle would not be applicable in the case of such trade missions or seminars.

If you agree that follow-up trade missions or seminars would be desirable, I recommend that we defer setting specific dates until we have the inputs of the participating organizations on each side.

Should you have any questions or desire additional information concerning any of the documents or companies included in this submission, please let me know. I will be more than happy to try to provide additional material. If you would like to contact any of the companies directly, please feel free to do so. Addresses are contained in the summaries and literature transmitted.

I would appreciate it if you would acknowledge receipt of this material so that I can know that it arrived in satisfactory condition.

Sincerely yours,

R. E. Harrington  
Director

Air Pollution Control Division

1. M. W. Kellogg Company: (Division of Pullman, Inc.)

Company is interested and active in the engineering and application of sulfur dioxide control methods to utility generating stations; removal of hydrogen cyanide and sulfur compounds from coke oven gases; and water purification methods for coke oven discharges. Constructor of tall stacks for dispersion of atmospheric pollutants of flue gases. They are interested in particulate removal in minus 10 micron range and are currently active in Russia in design of several large ammonia plants.

Appendices 1, 1A, 1B, 1C, 1D, and 1E cover submitted information.

Address: The M. W. Kellogg Company  
1300 Three Greenway Plaza, East  
Houston, Texas 77046

2. Xonics:

This company is actively engaged in services for comprehensive air quality monitoring systems. Additionally, Xonics manufactures and markets instruments for the measurement of various air pollutants which include carbon monoxide, hydrocarbons, oxides of nitrogen, and sulfur dioxide. The company also produces a self-contained, portable environmental measuring system complete with data collection, transmittal and recording system of their own design (DATACOL). Appendix No. 2 further details their interest.

Address: Xonics

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This company is engaged in the design, manufacturing and application of electrostatic precipitators, fabric filters, wet scrubbers, cyclones, and sulfur oxide control methods for the control of air pollutants. Additional areas of interest are in coal mining and coal preparation.

Joy presently has a technological exchange agreement with the USSR Ministry of Heavy Industry and the Academy of Science and Technology. Additional detailed information is given in Appendices 3, 3A, 3B, 3C, 3D, 3F, 3G, 3H, 3I, 3J, 3K, and 3L.

Address: Joy Manufacturing Company  
1000 West Ninth Street  
P. O. Box 2744 Terminal Annex  
Los Angeles, California, 90054

4. Pollution Control-Walther, Inc.:

This company engineers, designs, and manufactures electrostatic precipitators for both utility and industrial control. Appendices 4, 4A, and 4B provide additional information.

Address: Pollution Control-Walther, Inc.  
P. O. Box 7462-A  
Birmingham, Alabama 35223

5. Columbia Scientific Industries:

This company is interested in services, instruments, and the development of instrumentation for analysis of particulates and trace elements. Appendices 5, 5A, 5B, 5C, 5D, 5E, and 5F present additional detail.

Address: Columbia Scientific Industries  
3625 Bluestein Boulevard  
P. O. Box 6190  
Austin, Texas 78762

6. Spellman High Voltage Electronics Corporation:

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This company manufactures a variety of electrostatic precipitators and high voltage power supplies. They are also interested in the technology of improved filters of all types and scrubbers. Appendices 6 and 6A are their submitted information.

Address: Spellman High Voltage Electronics Corporation  
1930 Andee Avenue  
Bronx, New York 10469

7. International Systems & Controls Corporation:

A subsidiary of this company, Black, Swalls and Bryson has developed a process to recover  $H_2S$  and HCN from coke oven gas. They are interested in technology developed in USSR for control of particulate emissions from coke manufacture. Licensing or exchange of licenses is of interest. See appendix 7A for copy of correspondence.

Address: International Systems & Controls Corporation  
P. O. Box 2589  
Houston, Texas 77001

8. Gulf Oil Corporation:

This company is interested in offering licenses for the hydrodesulfurization of petroleum fractions and the catalytic and non-catalytic solvent refining of fuel. Gulf is in the R&D stage in the production of low calorific gas from coal.

Gulf is also interested in a joint research project involving the removal of sulfur dioxide from power plants stack gases. Appendix 8 is their letter.

Address: Gulf Building  
Pittsburgh, Pennsylvania 15230

This company is a manufacturer of fabric filter dust collectors which it would like to supply and is interested in licensing USSR technology for dust collection techniques. Correspondence and product descriptions are shown in appendices 9, 9A, 9B, and 9C.

Address: Enviro-Systems and Research, Inc.  
P. O. Box 658  
Roanoke, Virginia 24004

10. AiResearch Manufacturing Company of Arizona:

This company is interested in applying the Brayton Cycle (Joule Cycle) technology in coal gasification, utility power, and related technologies. Appendix 10 is their correspondence.

Address: AiResearch Manufacturing Company of Arizona  
402 South 36th Street  
Phoenix, Arizona 85034

11. Belco Pollution Control Corporation:

This company is interested in the field of electrostatic precipitators and the pretreatment of water for boilers, and chemical and petrochemical plants. They are particularly interested in some kind of license or representative agreement for their proprietary know-how. Appendix 11 is their correspondence.

Address: Belco Pollution Control Corporation  
570 W. Mt. Pleasant Avenue  
P. O. Box 412  
Livingston, New Jersey 07039

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12. Wheelabrator International, Inc.:

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This company is designing and installing air pollution control systems, water pollution control and solid waste disposal systems. They have supplied pollution control equipment to the Soviet Union over the past several years. They wish to know more about the specific areas of interest of the Soviet organizations and more of recent Soviet technological development in the areas of sulfur oxides removal, coal liquification, and coal gasification. Appendix 12 is their correspondence.

Address: Wheelabrator International, Inc.  
299 Park Avenue  
New York, New York 10017

13. Basic Technology, Inc.

This Company would like to explore possibilities both to market their particulate scrubber in the USSR and to market USSR equipment and technology in the USA. See Appendix 13 for further detail.

Address: Basic Technology, Inc.  
201 Penn Center Boulevard  
Pittsburgh, Pennsylvania 15235

14. Industrial & Environmental Engineering:

This company is a consulting engineering firm which has indicated experience in environmental control and shows background in technical and industrial activities in the USSR.

Correspondence and a qualification statement is shown in appendix 14 and 14A.

Address: Industrial & Environmental Engineering  
1624 Franklin Street - Suite 402  
Oakland, California 94612

15. General Resource Corporation (Polygon Construction Co.): /d

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This is a holding company whose subsidiary companies are all engaged in the environmental protection field. Capabilities listed include: removal of sulfur oxides from stack gases, development of filters, scrubbers, and precipitators, systems development for emission control, coal cleaning methods. Interested in joint project efforts with USSR. Appendix 15 is their correspondence.

Address: General Resource Corporation  
6340 Industrial Drive  
Hopkins, Minnesota 55343

16. Ecotrol, Inc. (subsidiary of W. R. Grace Company):

This company manufactures longitudinal frequency generators for control of particulate matter. Units are still in field test stage. Appendices 16 and 16A are their submitted information.

Address: Ecotrol, Inc.  
W. R. Grace Company  
7379 Route 32  
Columbia, Maryland 21044

17. Foster Wheeler Corporation:

This company is interested in the direct sale of sulfur oxides removal equipment. They are represented in the USSR by the SATRA Consulting Corporation. Appendices 17, 17A, 17B are their correspondence.

Address: Foster Wheeler Corporation  
110 South Orange Avenue  
Livingston, New Jersey 07039

18. Scientific Denoting Company:

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This company is interested in optical phenomena. Appendix

18 is their correspondence.

Address: Scientific Denoting Company  
400 Park Lane  
Lake Bluff, Illinois 60044

19. Peabody-Galion:

This company is interested in air pollution control systems. Specific expertise is in sulfur dioxide removal. Appendix 19, 19A, and 19B are their correspondence.

Address: 835 Hope Street  
Stamford, Connecticut 06907

20. Atomics International: (North American Rockwell)

This company is interested in the removal of sulfur oxides from stack gases. They are currently developing a molten carbonate process and Aqueous Carbonate Process for flue gas cleaning. They have been engaged in business with the USSR in other business areas. Appendix 20 is their correspondence.

Address: Atomics International  
P. O. Box 309  
Canoga Park, California 91304

21. Solar Power Corporation:

This company is interested in marketing solar power supplies for instrumentation. Appendix 21 is their expression of interest.

Address: Solar Power Corporation  
186 Forbes Road  
Braintree, Massachusetts 02184

22. Ekono, Seattle Office:

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This company is a consulting engineering firm with main offices in Finland and branch offices in Austria and the U.S. Their correspondence (appendix 22), a company brochure (appendix 22B) and a listing of clients (appendix 22C), and a summary of experience of key personnel (appendix 22D) has been submitted.

Address: Ekono, Seattle Office  
410 Bellevue Way, S.E.  
Bellevue, Washington 98004

23. Science Applications, Inc.:

This company is active in development of advanced electro-optical instrumentation for monitoring of pollutant emissions and precipitators for particulate control. See Appendix 23 for correspondence.

Address: Science Applications, Inc.  
P. O. Box 2351  
1200 Prospect Street  
La Jolla, California 92037

24. Envirotech:

This company is interested in broadening their cooperative efforts in the environmental field. They have expertise in waste water treatment and sulfur dioxide gas treating systems. Appendixes 24, 24A through 24Z and 24AA through 24II are enclosed as their submissions.

Address: Envirotech  
3000 Sandhill Road  
Menlo Park, California 94025

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Sunoco has expressed an interest in exploring the potential for trade arrangements with the USSR. Their interest goes beyond environmental activities. However, their environmental interests include electrostatic precipitation and waste water treatment. Appendix 25 is their correspondence.

Address: Sun Oil Company  
1608 Walnut Street  
Philadelphia, Pennsylvania 19103

26. Koppers:

This company manufactures electrostatic precipitators, coke oven pollution control, sound control equipment, and equipment for water and waste water treatment. They are interested in the sale of either entire systems or component parts to the USSR. They would like also to consider licensing arrangements. Appendices 26 and 26A are their correspondence.

Address: Koppers  
P. O. Box 298  
Baltimore, Maryland 21203  
(and Pittsburgh, Pennsylvania 15219)

27. Wilputte Corporation:

Wilputte Corporation has expressed an interest in exploring possible trade arrangements with the USSR. They have requested more detail before definitely making up their minds as to the extent of their participation. Their business is coke ovens, coke plants, and environmental control systems.

Address: Wilputte Corporation  
152 Floral Avenue  
Murray Hill, New Jersey 07974

This company offers scrubber systems for sulfur oxide control and particulate control. For sulfur oxide control they offer lime scrubbing systems and MgO recovery systems. See Appendices 28 and 28A for correspondence submitted:

Address: Chemical Construction Corporation  
One Penn Plaza  
New York, New York 10001

29. United States Filter Corporation:

This company is interested in marketing proprietary equipment which includes electrostatic precipitators, fabric filters, and wet scrubbers. They report successful pilot work for power plant, coke oven and sinter plant control. See Appendix 29 for correspondence and Appendix 29A for brochure.

Address: United States Filter Corporation  
522 Fifth Avenue  
New York, New York 10036

30. Combustion Engineering, Inc.:

This company manufactures waste disposal systems, dust collectors, nitrogen oxides control systems, and scrubbers for sulfur oxides. Appendices 30 and 30A through 30J are their correspondence and literature.

Address: Combustion Engineering, Inc.  
Windsor, Connecticut 06095

31. Radian Corporation:

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The company is interested in supplying engineering services and is marketing mobile systems for monitoring ambient air quality. Correspondence (Appendix 31) and a brochure describing monitoring equipment (Appendix 31A) is attached.

Address: Radian Corporation  
8500 Shoal Creek Boulevard  
P. O. Box 9948  
Austin, Texas 78766

32. Parker Hannifin:

This company is interested in marketing their environmental products in the USSR. They manufacture vapor recovery systems primarily for use in the petroleum industry. Appendix 32 is their correspondence. Appendices 32A, etc., are brochures describing products.

Address: Parker Hannifin  
18321 Jamboree Boulevard  
Irvine, California 92664

33. Eastern Associated Coal Corporation: (Subsidiary of Eastern Gas and Fuel Association)

This company is interested in cooperative opportunities with the USSR, particularly in the area of research and development. Areas of interest are coal cleaning, coal mine health and safety, and coal utilization. Appendix 33 is their correspondence.

Address: Eastern Associated Coal Corporation  
Research Center  
138 Robin Street  
Everett, Massachusetts 02149

is company is interested in c and oil gasification.

They have started a cooperative program of their own with the USSR but wish to be kept informed of developments. Appendix 34 is their correspondence.

Address: Westinghouse Electric Corporation  
Westinghouse Building  
Gateway Center  
Pittsburgh, Pennsylvania 15222

35. Copeland Systems Incorporated:

This company wishes to sell license agreements to USSR relative to pulpuand paper mill sulfite liquor disposal systems, sulfur dioxide removal systems, systems for disposal of municipal wastes. Appendix 37 is their correspondence.

Address: Copeland Systems, Inc.  
2000 Spring Road  
Oak Brook, Illinois

36. Battelle:

This research institute wishes to share experiences and techniques in pollution control with similar organizations in the USSR. They are interested in removal of sulfur oxides, filters, scrubbers, eledtrostatic precipitators, control of ice fog, and coal cleaning. Appendix 38 is their correspondence.

Address: Battelle, Columbus Laboratories  
505 King Avenue  
Columbus, Ohio 43201



This company is interested in the mechanical cleaning of coal to remove ash and sulfur. They are interested in the sale of coal washeries to the Russian coal industry. Appendix 37 is their correspondence.

McNally Pittsburg Manufacturing Corporation  
101 E. 4th Street  
P. O. Box 651  
Pittsburg, Kansas 66762

38. NUS Corporation:

This firm provides engineering consultation and is interested in project definition, development, and management. Correspondence, brochures, and qualification statements are included in Appendices 44, 44A, etc.

Address: NUS Corporation  
4 Research Place  
Rockville, Maryland 20850

39. Andersen 2000, Inc.:

This company would like to explore licensing arrangement for the Andersen air samplers. Appendix 39 is their correspondence.

Address: Andersen 2000, Inc.  
P. O. Box 20767  
Atlanta, Georgia 30320

40. Science Spectrum, Inc.

This company would like to explore research and trade opportunities in the area of particulate measurement and counting. Their letter is Appendix 40; their brochure Appendix 40A.

Address: Science Spectrum, Inc.  
1216 State Street  
P. O. Box 3003  
Santa Barbara California 93105

41. Resource Systems Research:

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Interested in exploring information and technology exchanges in the area of waste disposal including air pollution system wastes. See Appendix 41.

Address: Resources System Research  
P. O. Box 292  
Wyomissing, Pennsylvania 19610

42. Davy Powergas, Inc.:

This company markets the SO<sub>2</sub> control process that is best known as the Wellman-Lord process. It is a regenerable sodium salt scrubbing process. Appendix 42 is their response.

Address: Davy Powergas, Inc.  
Lakeland, Florida 33803

43. Environeering, Inc. (as Subsidiary of Riley Company):

Environeering, Inc., has expressed an interest in exploring trade possibilities in the areas of sulfur dioxide control and particulate scrubbing. Appendix 43 is their letter.

Address: Environeering, Inc.  
A Subsidiary of Riley Co.  
9933 North Lawler  
Skokie, Illinois 60076

44. Environmental Data Corporation:

Interested in exploring trade possibilities of leasing or selling their multi-gas analyzing systems. See Appendices 44 and

44A.

Address: Environmental Data Corporation  
608 Fig Avenue  
Monrovia, California 91016

45. Research-Cottrell:

This company is interested both in exchange of information with appropriate USSR organizations and in exploring business opportunities concerning licensing or joint ventures. Appendix 45 is their expression of interest.

Address: Research-Cottrell  
Box 750  
Bound Brook, New Jersey 08805

ITINERARY

2ND MEETING US/USSR WORKING GROUP ON  
STATIONARY SOURCE AIR POLLUTION CONTROL

STATINTL

April 12, Friday

6:00 p.m. Aeroflot Airlines arrival of Soviet Delegation @ Dulles Airport

Hotel Reservations: Statler-Hilton, 16th & K, N.W. Wash.  
Telephone - EX3-1000

April 13, Saturday

3:00 p.m. - 5:00 p.m. Meeting in Statler-Hilton to review agenda  
(look at the proposed agenda for content of meetings)

6:00 p.m. Dinner: La Grande Scene Restaurant  
Kennedy Center for the Performing Arts

8:00 p.m. Concert: Lincoln Center Chamber Music  
Bach: Brandenburg Concerto No. 2 in F major  
Mendelssohn: Sonata for Cello and Piano No. 2 in D major

Beethoven: Duet "With Two Eyeglasses Obligato" for Viola and Cello

Spohr: Octet for Strings in E major

April 14, Sunday

1:00 p.m. - 5:00 p.m. Meeting of the Working Group (for topics, look on Agenda)  
@ EPA, Administrator's Conference Room

5:00 p.m. - 7:00 p.m. Break for Dinner

7:00 p.m. - 9:00 p.m. Meeting of the Working Group continued

April 15, Monday

9:00 a.m. - 12 Noon Meeting of the Working Group @ EPA, Conf. Rm. 3307

12 Noon - 1:30 p.m. Break for Lunch

1:30 p.m. - 5:00 p.m. Meeting of the Working Group continued

April 16, Tuesday

9:00 a.m. - 12 Noon Meeting of the Working Group @ EPA in Conf. Rm. 3305

12 Noon - 1:30 p.m. Break for Lunch

1:30 p.m. - 3:00 p.m. Meeting of the Working Group continued

6:40 p.m. - 8:04 p.m. Lv. DCA(Piedmont Flight 15)  
Travel to Research Triangle Park, North Carolina

Hotel Reservations: Governor's Inn, RTP  
Tel. - (919) 549-8631

April 17, Wednesday

9:00 a.m. - 1:00 p.m. Soviet Delegation to visit National Environmental  
Research Center, Control Systems Laboratory,  
Research Triangle Park, North Carolina

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Group I

Soviet Delegation Members:

Anikeyev, V.A.

Kostrikov, V. I.

Maslennikov, V. M.

Podoshevnikov, B. F.

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Group II

Soviet Delegation Members:

Manshilin, V. V.

Yegorichev, A. P.

Yergorov, N. S.

Yeremin, I. V.

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Group I:

Travel to Birmingham, Alabama

3:17 p.m. - 4:19 p.m. (United #637)

Group to be met at airport by Southern Research Institute (SRI) representative

6:30 p.m. Dinner at The Club with representatives of SRI, Alabama Power Co.,  
and American Cast Iron and Pipe Co.

Hotel Reservations: Guest House Motel, Birmingham, Alabama

Group II:

Travel to Newark, New Jersey

5:57 p.m. - 7:07 p.m. (United #344)

Group escorted by Lloyd Lorenzi, Control Systems Laboratory, EPA, RTP  
Drive to Princeton, New Jersey

Hotel Reservations: Princeton, Holiday Inn, Rte. 1 at intersection of  
Aqueduct Rd. Tel. - (609) 452-9100

April 18, Thursday

Group I:

8:00 a.m. - 12:00 Noon Visit Gorges Power Plant's electrostatic precipitator,  
Escorted by SRI representative

12:00 Noon - 1:00 p.m. Lunch

1:00 p.m. - 3:00 p.m. Visit American Cast Iron and Pipe Co. - cupola scrubber  
Escorted by SRI representative

Travel to St. Louis, Missouri  
5:12 p.m. - 7:03 p.m. (So. #238)

At St. Louis Airport, Group meets Dr. James M. Shackelford, EPA representative

Hotel Reservations: Hilton Inn-Airport, St. Louis, Missouri  
Tel. (314) 426-5500

Group II:

9:00 a.m. - 3:00 p.m. Visit Hydrocarbon Research Institute, Trenton, N.J.  
oil refining. Escorted by Lloyd Lorenzi

Travel to Pittsburgh, Pennsylvania  
6:27 p.m. - 8:20 p.m. (Alleghany #719)

Group escorted by Lloyd Lorenzi

Hotel Reservations: Holiday Inn-Airport, Pittsburgh, Penn.  
Tel. (412) 771-6500

April 19, Friday

Group I:

8:30 a.m. - Delegation and escort is met by Jim May from Illinois Power Co.  
at the hotel.

10:00 a.m. - 12 Noon Meeting at Wood's River Power Station with Illinois  
Power Co., and Monsanto

12 Noon - 1:00 p.m. Lunch

1:00 p.m. - 3:00 p.m. Visit catalytic oxidation site for SO<sub>2</sub> removal from  
flue gases at Wood's River Power Station. Group is  
escorted by Jim Shackelford, EPA representative.

Travel to Chicago, Illinois  
5:07 p.m. - 6:00 p.m. (DL#652) Group is met by R. E. Harrington at airport

Hotel Reservations: La Salle Hotel, Chicago  
Tel. (312) 372-0700

Group II:

9:00 a.m. - 4:00 p.m. Visit Westinghouse Electric Corporation in Pittsburgh, Beulah Road in Churchill Borough, gasification of coal, high-temperature clean-up technology. Group is escorted by Lloyd Lorenzi.

Tentative visit for delegate from Iron & Steel to visit U. S. Steel in Pittsburgh, escorted by Norm Plaks, EPA Control Systems Laboratory, RTP

Travel to Chicago, Illinois

6:45 p.m. - 7:15 p.m. (TWA#261)

Group will be met by T. K. Janes, EPA, Control Systems Laboratory, at the airport

Hotel Reservations: La Salle Hotel, Chicago  
Tel. (312) 372-0700

April 20, Saturday

10:00 a.m. - 1:00 p.m. Meeting of the Working Group in the Environmental Protection Agency's Regional Office

1:00 p.m. - 2:30 p.m. Break for Lunch

2:30 p.m. - 5:00 p.m. Meeting of the Working Group continued

7:30 p.m. - Cocktails and Dinner, Venetian Room, Drake Hotel - Hosted by the Institute of Gas Technology

April 21, Sunday

10:00 a.m. - 1:00 p.m. Meeting of the Working Group in the Environmental Protection Agency's Regional Office

1:00 p.m. - 2:30 p.m. Break for Lunch

2:30 p.m. - 5:00 p.m. Meeting of the Working Group continued

Group I:

Travel to Indianapolis, Indiana

7:55 p.m. - 8:37 p.m. (Delta#693) Group escorted by R. E. Harrington and M. J. Stasikowski, EPA

Hotel Reservations: Holiday Inn-Airport, Indianapolis  
Tel. (317) 244-6861

April 22, Monday

Group I:

8:30 a.m. - Group met by F. Chalmers from McKee Company

9:00 a.m. - 4:00 p.m. Visit Sodium Citrate Vigo Plant in Terre Haute, Indiana  
(removal of  $\text{SO}_2$  from gas mixture with help of a solution  
of sodium citrate)  
Group Escorted by R. E. Harrington and M. J. Stasikowski, EPA

Travel to Louisville, Kentucky

7:05 p.m. - 7:37 p.m. (EA#269)

Hotel Reservations: Holiday Inn-Downtown, 927 S. 2nd St.  
Tel. (502) 582-3741

Group II:

9:00 a.m. - 4:00 p.m. Visit Institute of Gas Technology in Chicago,  
gasification of coal, high-temperature clean-up technology.  
Group escorted by Leon Stankus from EPA, Control Systems  
Laboratory.

Travel to Detroit, Michigan

6:30 p.m. - 8:25 p.m. (AA#268)

Hotel Reservations: Sheraton-Metro, Airport in Detroit  
Tel. (313) 728-7900

April 23, Tuesday

Group I:

8:30 a.m. Meet Robert VanNess, Environmental Affairs Manager at Louisville  
Power Company; 311 West Chestnut Street

9:30 a.m. - 4:00 p.m. Visit Paddy's Run Power Plant, Lime Scrubbing to  
Remove  $\text{SO}_2$ . Group escorted by R. E. Harrington and  
M. J. Stasikowski

Travel to Dayton, Ohio

5:45 p.m. - 7:55 p.m. (Alleghany#414) Group met by Carl Taylor from Sarge  
Paper Company at the airport

Hotel Reservations: Manchester Hotel in Middletown, Ohio



Group II:

9:00 a.m. - 4:00 p.m. Visit to Consumer Power Company; Jackson, Michigan, Commercial oil gasification plant. Group escorted by Leon Stankus, EPA, Control Systems Laboratory.

Tentative visit set up for delegate from Iron & Steel ministry to visit Great Lakes Steel subsidiary of National Steel. Escorted by Norm Plaks, EPA, CSL

Travel to Pittsburgh, Pennsylvania

7:57 p.m. - 8:50 p.m. (United#86)

Hotel Reservations: Howard Johnson, Rte. 51 South  
Tel. (412) 884-6000

April 24, Wednesday

Group I:

8:00 a.m. Group is to be met by John Burckle, EPA, National Environmental Research Center, Cincinnati at the hotel.

9:00 a.m. - 3:00 p.m. Visit Sarge Power Paper Co. to visit baghouse.  
Escorted by John Burckle, EPA

Travel to Washington, D. C.

4:42 p.m. - 5:58 p.m. (United #708) Group to be met by R. E. Harrington at airport

Hotel Reservations: Statler-Hilton, Washington, D.C.  
Tel. EX3-1000

Group II:

9:00 a.m. - 4:00 p.m. Visit to the Bureau of Mines, Pittsburgh Coal Research Center, gasification and liquefaction of coal. Physical coal cleaning group escorted by Leon Stankus, EPA and M. J. Stasikowski, EPA

Tentative visit set up for delegate from Iron & Steel Ministry to visit Whearton Steel subsidiary of National Steel. Escorted by Norm Plaks, EPA

Travel to Washington, D. C.

6:15 p.m. - 8:10 p.m. (Alleghenay #750)

Hotel Reservations: Statler-Hilton, Washington, D. C.  
Tel. EX3-1000

April 25, Thursday

9:00 a.m. - 12 Noon Working Group Meeting, Internal Revenue Building, Rm. 2132  
12 Noon - 1:30 p.m. Break for Lunch  
2:30 p.m. - 5:00 p.m. Working Group Meeting continued  
7:30 p.m. - Farewell Dinner at La Bella Vista Alfio's Restaurant, Arlington, Va.

April 26, Friday

9:00 a.m. - 12 Noon Final Protocol Meetings, EPA  
12 Noon - 3:00 p.m. Lunch and tour of the White House  
3:30 p.m. - 4:30 p.m. Protocol signing, EPA, Administrator's Conference Room  
5:30 p.m. - Soviet Delegation departs for Dulles International Airport  
8:10 p.m. - Aeroflot flight leaves for Moscow